# EPSON PowerLite® S1





## **Meaning of Symbols**

•	Indicates the possibility that people may be injured or the equipment may be damaged if these symbols are ignored.
<b>⊗</b>	Indicates important related information or useful information and things you should know.
	Indicates related topics and pages which contain more detailed information.
†	Provides terminology definitions. See <u>"Glossary" on page 61</u> .

The terms 'this unit' and 'this projector' which appear in this manual may also refer to the accessories supplied with the projector and other optional products.

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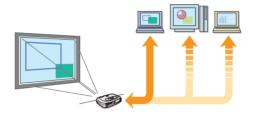
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## **Features**

# Auto setup (Computer connections)

The projector analyzes the signal of the computer to which it is connected and automatically makes adjustments to ensure optimal projection results. See "Functions for Enhancing Projection" on page 29.



## Clear, vivid, images

The projector's high resolution and high luminance achieves a legible display. Project sharp, detailed images, even in bright places.



#### Color mode

Image quality can be selected according to the type of scene. See "Selecting a color mode" on page 29.



#### Ease of use

Various projector operations can be easily performed using the included remote controls, as follows:

- pausing projection
- zooming in on important areas of an image



#### Compact and lightweight

The projector is compact and easy to carry.

- Dimensions:
   10.4 (d) × 14.6 (w) × 4.2 (h) inches
   26.5 (d) × 37 (w) × 10.6 (h) cm
- Weight: approximately 7 lbs (3.2 kg)



#### Unique presentation function

The mouse pointer can be moved around on the computer screen during projection using the included presentation remote control. (wireless mouse)



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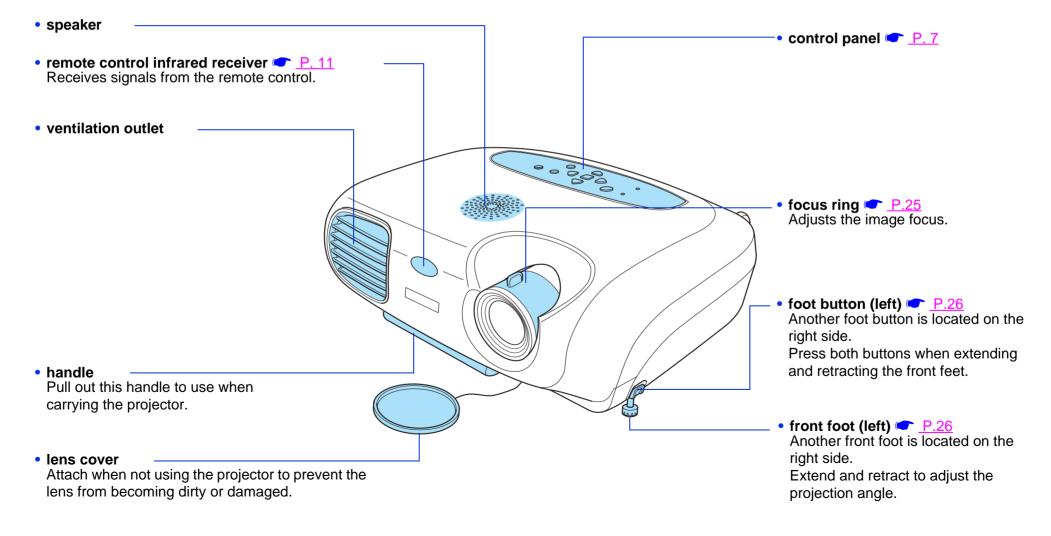
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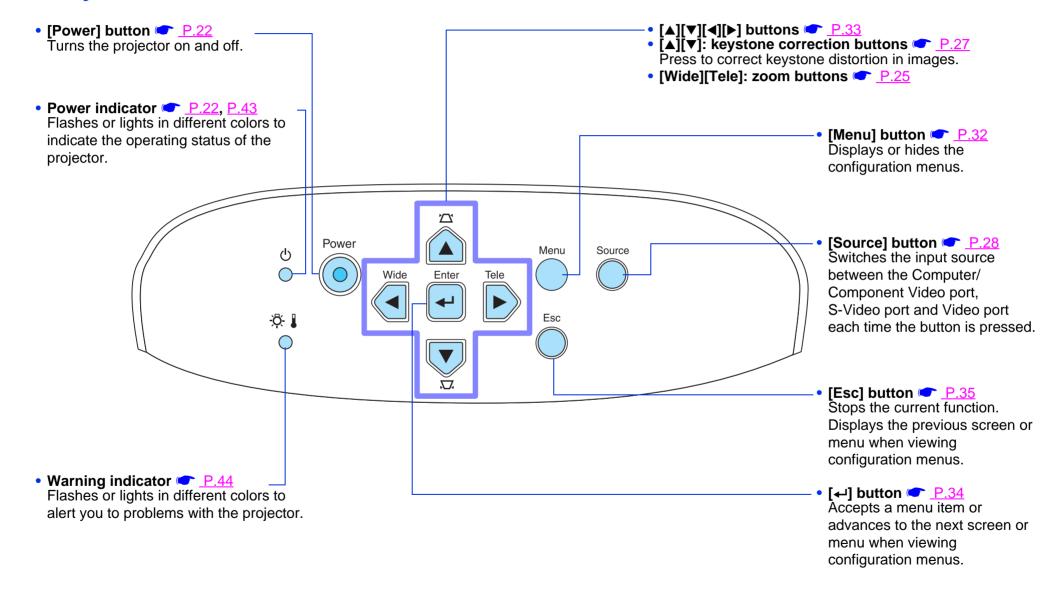
# **Before Using the Projector**

## **Part Names and Functions**

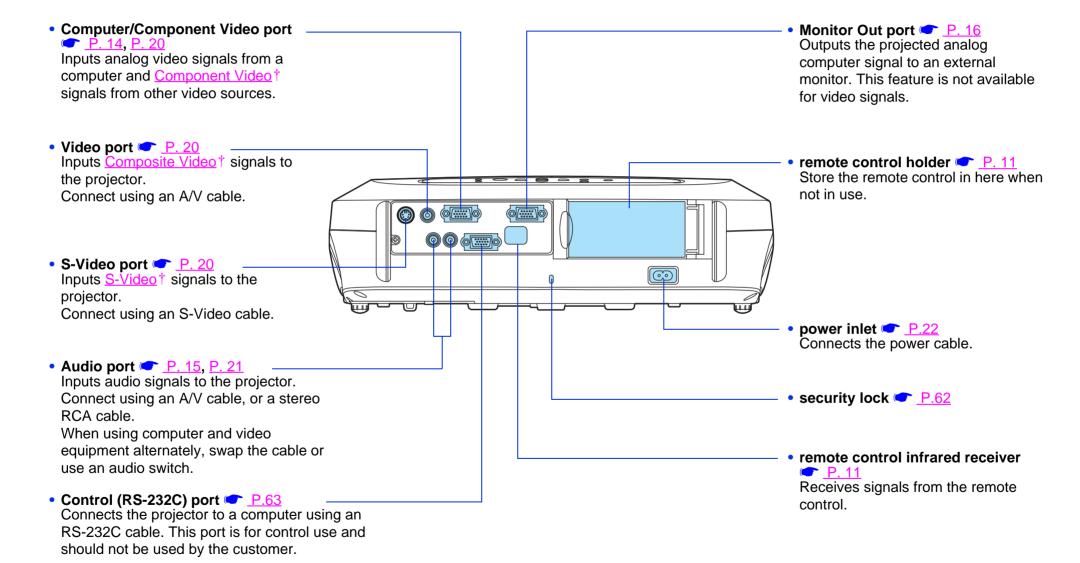
## Front/Top



## **Control panel**



#### Rear

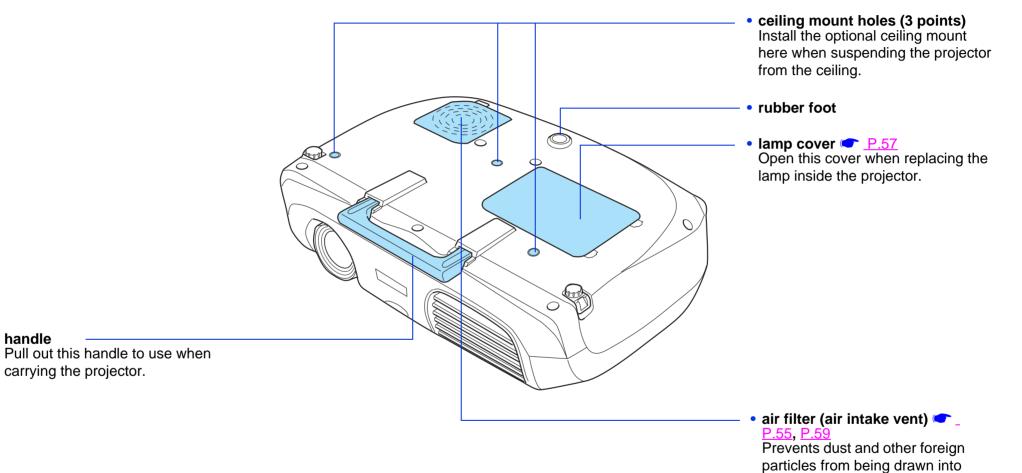


the projector. When replacing the lamp, replace the air filter

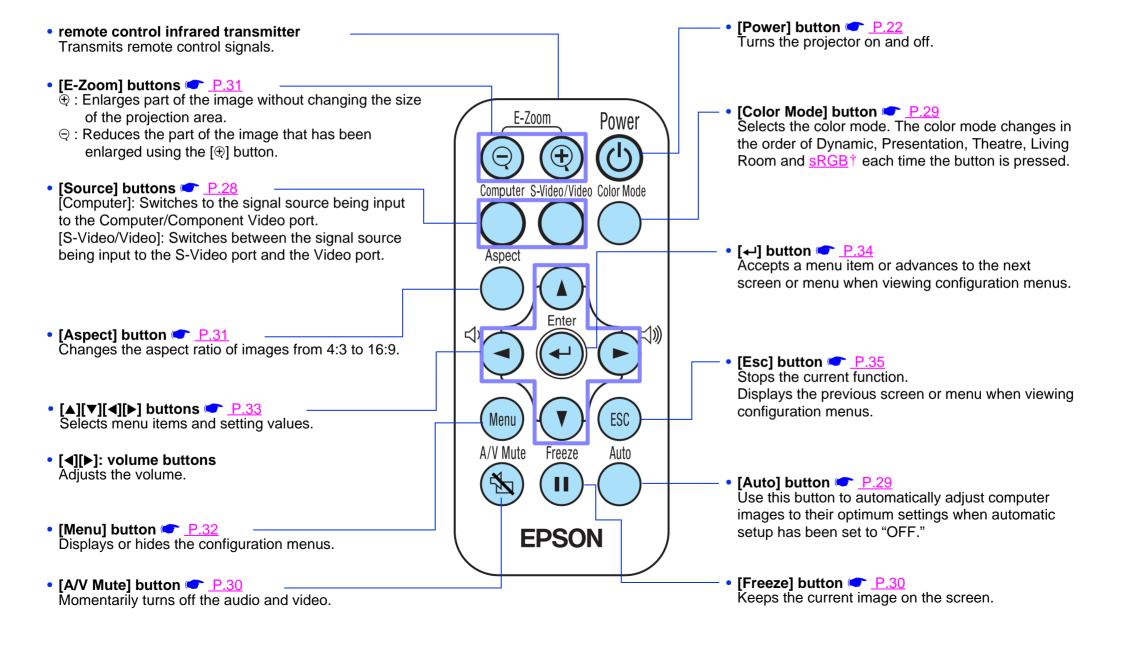
also.

#### Base

handle

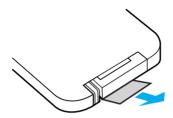


#### **Remote Control**



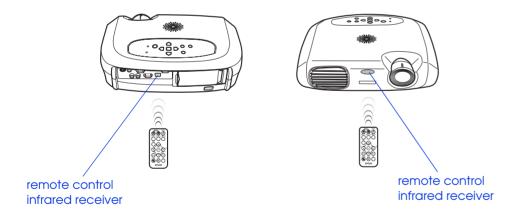
## Before using the Remote Control

Remove the insulating tape.



## Using the Remote Control

Operate the remote control by aiming it at the remote control infrared receiver on the projector.





If direct sunlight or fluorescent lighting hits the remote control infrared receiver, you may not be able to use the remote control.

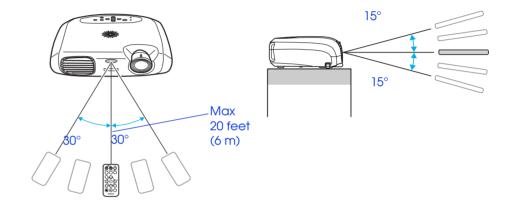
## Operating range

Operable distance: Max. approximately 20 feet (6 m)

(May be shorter depending on conditions.)

Operable angle: approximately 30° horizontally, 15° vertically

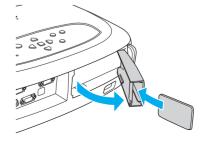
\* The remote control infrared receiver on the back of the projector can also be used under the same conditions.



#### Storage

When not using the remote control, please store it in the remote control holder on the projector.

- 1 Open the remote control holder.
- 2 Place the remote control in the remote control holder.
- 3 Close the remote control holder until it clicks into place.



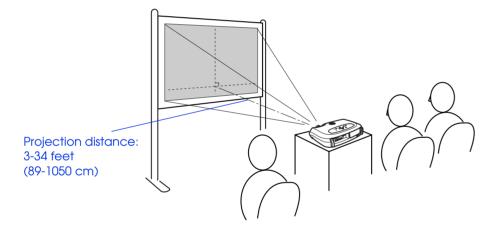
## **Installation**



Be sure to read the Important Safety Instructions before installation.

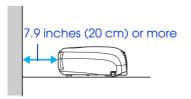
#### **Installation method**

Set up the projector so that it is at right angles to a screen.



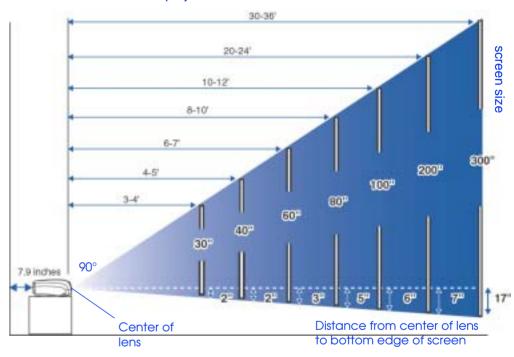


When setting up the projector against a wall, leave a space of at least 7.9 inches (20 cm) between the projector and the wall.



## Projection distance and screen size

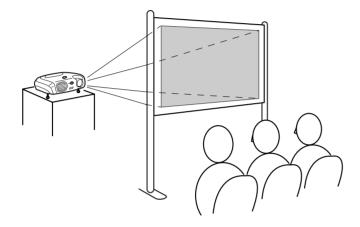
#### Distance from projector to screen



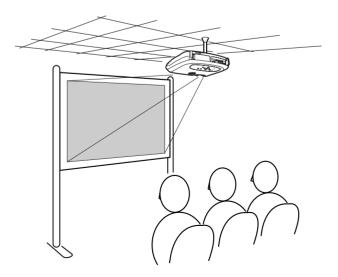
#### Other installation methods

## Rear projection

(Using a translucent screen)

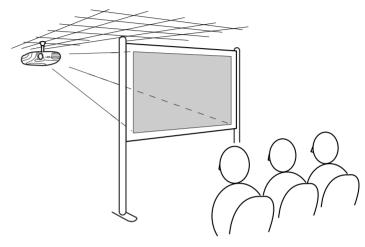


## Ceiling projection



## Ceiling/Rear projection

(Using a translucent screen)



The optional ceiling mount is required when installing the projector from a ceiling. Please contact your dealer if you wish to use this method, as special equipment is required for installation. See "Optional Accessories" on page 60.



When using rear projection, or projecting from a ceiling, select the appropriate mode in the "Setting"  $\rightarrow$  "Screen"  $\rightarrow$  "Projection" configuration menu. See "Setting menu" on page 39.

## **Connecting to a Computer**



When connecting, be sure to:

- Turn off the power for both the projector and the computer.

  Damage may result if you try to make a connection when the power is switched on.
- Check the connector types.

  Damage may result if you attempt to insert a connector into the incorrect port.

## **Compatible computers**

**Condition 1**: Check that the computer has an image output port, such as an RGB port, monitor port or CRT port.

Some computers with a built-in monitor and some notebook computers may not be compatible. Please refer to your computer manual for further details.

**Condition 2**: The display frequency and resolution of the computer must correspond to that of the projector. See <u>"Supported Display Resolutions" on page 64</u>.



You may need to purchase a separate adapter depending on the shape of the computer's port. Refer to the documentation provided with the computer for further details.

#### Notebook connection





When using a notebook or a PC with a built-in monitor, select external video output on the computer.

#### Setup

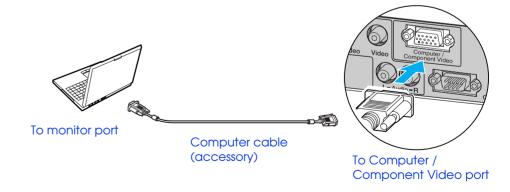
Press and hold the [Fn] key, followed by the appropriate function number key that lets you display on an external monitor. Refer to your computer's documentation for further details.

- It may take a few moments until the computer image is projected.
- In Windows, a dialog box may appear to alert you that new display hardware has been found. Follow the on-screen instructions to proceed. If you have any problems, check the troubleshooting chapter for possible solutions. See <u>"Troubleshooting" on page 43.</u>
- Depending on the PC, the monitor may go blank when using the external video output on the computer.

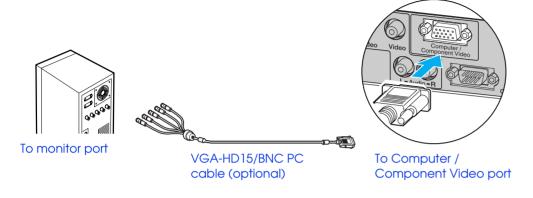
### **Projecting images from a computer**

Different cables are used depending on whether the monitor port of your computer is a Mini D-Sub 15Pin, <u>5BNC</u>† or 13w3 port.

#### When using a Mini D-Sub 15 pin connector

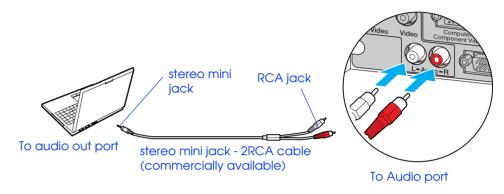


#### When using a 5BNC port

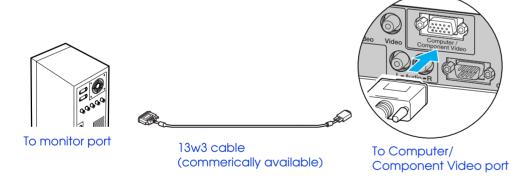


## Playing sound from a computer

You can play sound from a computer through the projector's built-in speaker.



## When using a 13w3 port

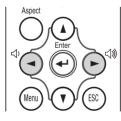




When using computer and video equipment alternately, swap the cable or use an audio switch.

## Volume adjustment

Press [◀] or [▶] on the remote control.



You can also adjust the volume from the configuration menu.

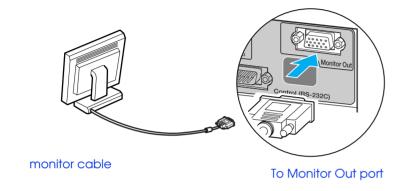
([Menu] button  $\rightarrow$  "Setting"  $\rightarrow$  "Volume") See "Setting menu" on page 39.



- Select "Computer" in the "Image" → "Input signal" configuration menu. See "Image menu" on page 36.
- Do not bind the power cable and computer cables together. Interference or operational problems may result.
- A particular type of cable may be required for some workstations. Please check with the maker of your workstation.

## Connecting to an external monitor

The image being input into the projector can be displayed on a computer monitor.

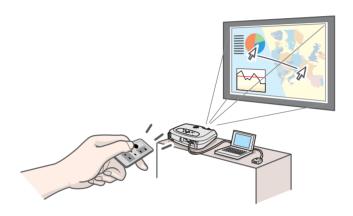




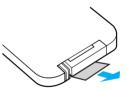
- Video images cannot be output to an external monitor.
- Setting gauges (for keystone correction, etc.) and configuration menus will not be displayed on an external monitor.

#### **Presentation Remote Control**

You can use the presentation remote control as a wireless mouse to control the mouse pointer on the computer screen. The presentation remote contains all the functions necessary for giving a presentation. Functions include: Page Up/Page Down, Left/Right mouse click, A/V mute, freeze, and mouse pointer.



Before using the presentation remote control, remove the insulation tape.



### Compatible computers

Windows®: Windows 98/2000/Me/XP

(Only compatible with the full versions of Windows. Upgraded versions cannot be used.)

Macintosh®: Mac OS® 9.1 or later/OS X 10.1 or later



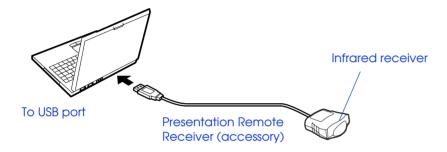
- The presentation remote receiver can only be connected to computers with a standard USB interface.
- Some computer settings may have to be changed in order for the mouse function to be used. Refer to your computer's documentation for details.

#### Installing the driver for Windows

Screen contents will differ according to the version of Windows you are using. This explanation uses screenshots taken from Windows 98.

Driver installation is not required for the Macintosh.

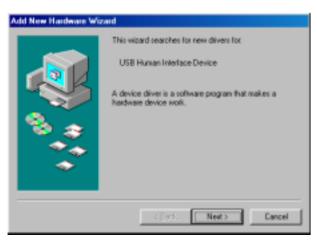
1 Connect the accessory Presentation Remote Receiver to the USB port of the computer.



The "Add New Hardware" wizard is displayed.

Under normal circumstances, maintain the default settings and click "Next" to proceed.

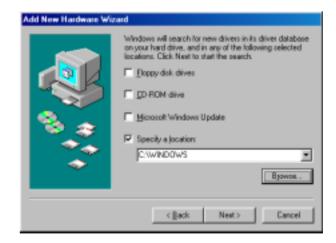
2 Click "Next."



3 Keeping the defaults, click "Next."



4 Click the check box next to "Specify a location." Type "C:\WINDOWS" and click "Next."



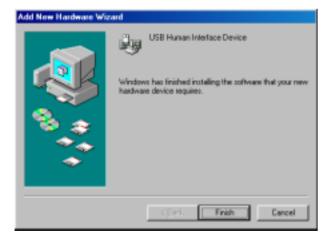


- You may need to enter a different location to search for the OS files that you are using.
- Click on "Browse" if you want to change the default search location.

5 Click on "Next" to confirm the message which is displayed.



6 Click on "Finish."



The installation of the driver is complete.

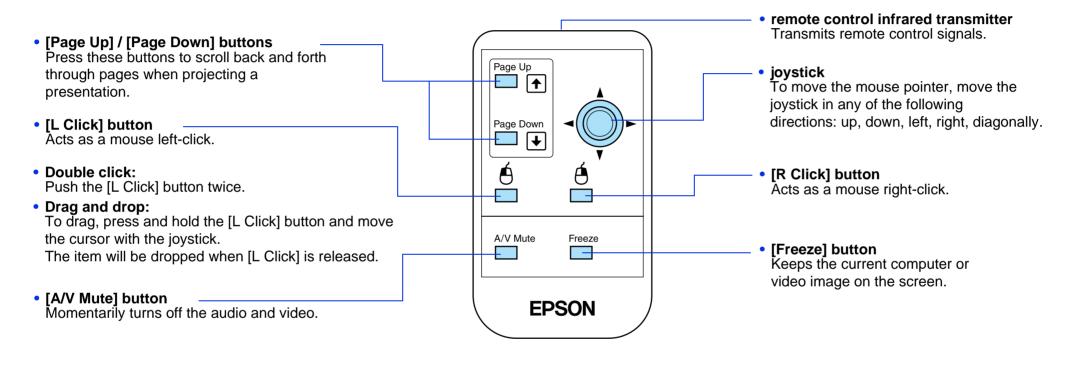


The driver installation screen is displayed a second time. (The presentation remote control driver has two parts; the mouse driver and the keyboard driver.) Follow the on-screen instructions to complete the installation.

#### Part Names and Functions

Operate the presentation remote control by aiming it at the presentation remote receiver.

When using the Freeze or A/V Mute functions, aim the presentation remote control towards the remote control infrared receiver of the projector.





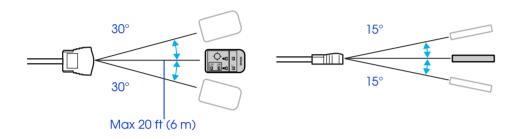
If the mouse button settings have been reversed on the computer, the operation of the remote control buttons will also be reversed.

## **Operating** range

Operable distance: Maximum approximately 20 feet (6 m)

(may be shorter depending on conditions)

Operable angle: Approximately 30° horizontally, 15° vertically



# **Connecting to Video Equipment**



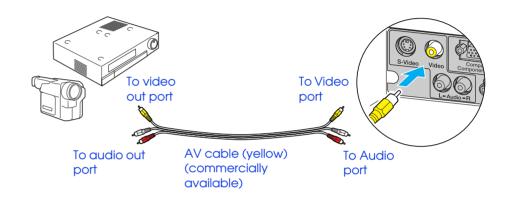
When connecting, be sure to:

- Turn off the power for both the projector and the video equipment. Damage may result if you try to make a connection when the power is switched on.
- Check the connector types.

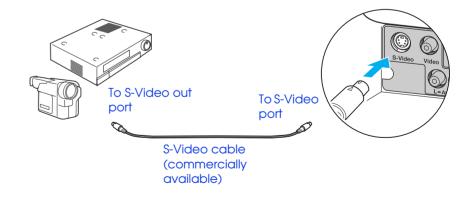
  Damage may result if you attempt to insert a connector into the incorrect port.

## **Projecting video images**

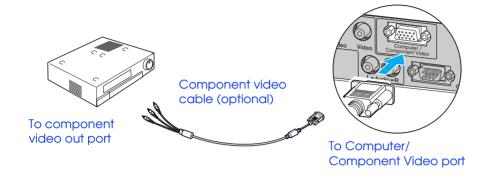
## For Composite Video (DVD, VHS, Video games)



## For S-Video (DVD, VHS, Video games)



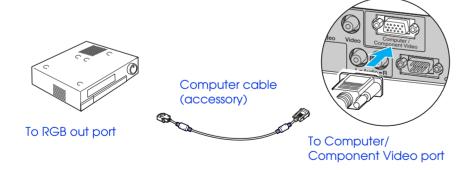
#### For Component Video (DVD, Video games)





After projection starts, change the "Input Signal" setting in the "Image" menu to either "Component Video (YCbCr†)" or "Component Video (YPbPr†)" to match the signals from the video equipment. P.36

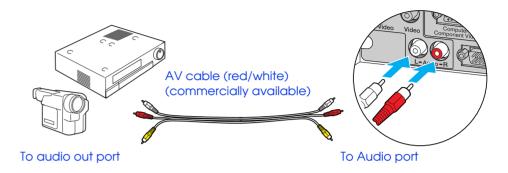
#### For RGB Video





- After projection starts, change the "Input Signal" setting in the "Image" menu to "Computer." 
   P.36
- For an RGB connection, a commercially available adapter or converter cable may be required.

## Playing sound from video equipment

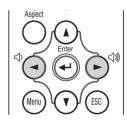




When using computer and video equipment alternately, swap the cable or use an audio switch.

## Volume adjustment

Press [◀] or [▶] on the remote control.



You can also adjust the volume with the configuration menu.

([Menu] button  $\rightarrow$  "Setting"  $\rightarrow$  "Volume") See "Setting menu" on page 39.

# **Basic Operation**

## **Turning on the Projector**

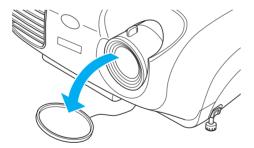


Turn off the power of the projector and the equipment you are connecting

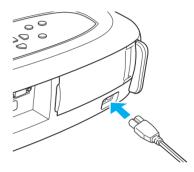
1 Connect the computer/video.

See "Connecting to a Computer" on page 14, "Connecting to Video Equipment" on page 20.

2 Remove the lens cover.

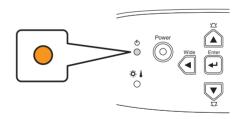


3 Attach the power cable to the projector.



4 Insert the power plug into a wall socket.

The power indicator lights orange.



5 Turn on the power of the computer/video.

If connected to a video source, start playback.

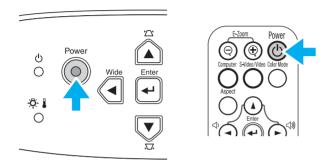


When using a notebook or a PC with a built-in monitor, select external video output on the computer. 

P.14

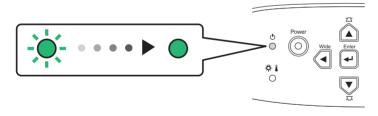
#### 6 Press the [Power] button.

The projector beeps and the power supply indicator begins to blink green.



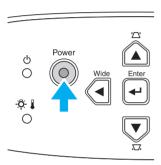
## Wait until the power indicator lights green.

It takes about 35 seconds.



## **Turning off the Projector**

- 1 Turn off the power to the computer/video equipment.
- 2 Press the [Power] button.





A confirmation screen is displayed.





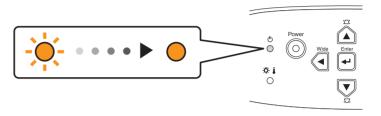
The confirmation screen disappears if anything other than the [Power] button is pressed, or if nothing is pressed for 7 seconds.

Press the [Power] button again.

The power indicator begins to blink.

4 Wait until the power indicator lights orange.

Cool-down† takes place. It takes about 20 seconds.

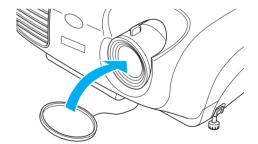


5 Unplug the projector from the outlet.



Do not remove the plug while the power indicator is blinking, or this may damage the projector.

- 6 Unplug the power cable at the projector.
- 7 Replace the lens cover.



## **Adjusting the Display**

## Adjusting the projection size

The size of the projected image is basically determined by the distance from the projector to the screen. See <u>"Projection distance and screen size" on page 12</u>.

1 Press the [Wide] or [Tele] buttons on the control panel to adjust the projection size.

[Wide]: increase the size [Tele]: reduces the size







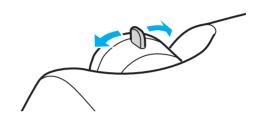
The image can be enlarged in this way to 1.2 times the normal size. If you would like to enlarge the image further, move the projector further away from the screen.



- The default setting is wide.
- The E-Zoom function lets you enlarge parts of the image. See "E-Zoom" on page 31.

## **Setting the focus**

Turn the focus ring to adjust the image focus.



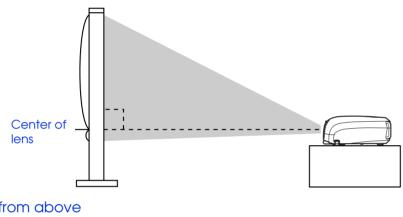


- If the surface of the lens is dirty, or misted over as a result of condensation, it may not be possible to adjust the focus correctly. If this happens, clean or de-mist the lens. See "Cleaning the lens" on page 54.
- If the projector is positioned outside the normal projecting range of 2.9-36.4 feet (87-1109 cm), it may not be possible to obtain the correct focus. If you have trouble obtaining the correct focus, check the projection distance.

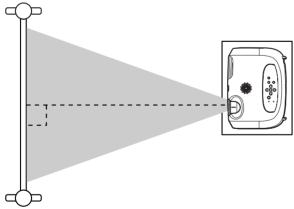
## Adjusting the projection angle

Set up the projector so that it is at right angles to the screen.

#### Seen from the side

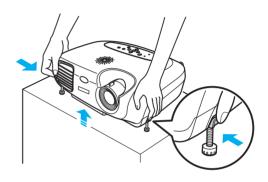


Seen from above



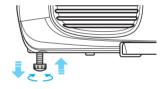
If it is not possible to set up the projector so that it is at right angles to the screen, it can be set up at a slight vertical angle instead. (Max 10°)

- Raise the front of the projector while pressing the buttons on both sides.
- Extend the front feet and release the buttons when the projector is adjusted to the desired height.





• The height can be adjusted by turning the base of the front feet on either side.



• Press the front buttons on both sides and slowly lower the projector down to return to its normal position.

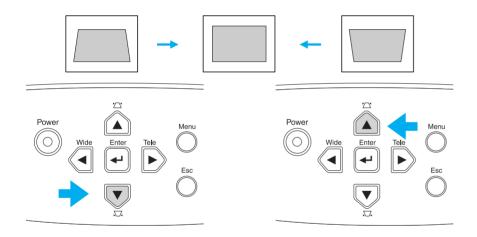
## **Keystone**

When the projector is not set at right angles to the screen, the display distorts in the shape of a trapezoid. This distortion can be corrected.



You can correct only vertical distortion with this function. Horizontal distortion cannot be corrected.

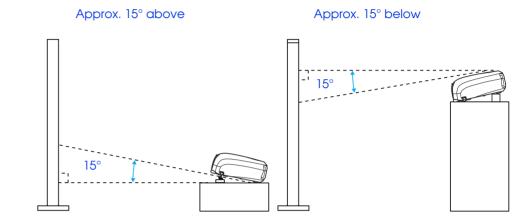
Press the [▲] or [▼] buttons.





- Screen size changes when keystone correction is performed.
- If the images become uneven in appearance after keystone correction is performed, decrease the sharpness setting. ([Menu] button → "Image" → "Picture Quality" → "Sharpness") See "Image menu" on page 36.

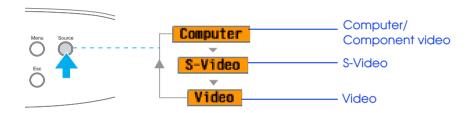
Images can be corrected without distortion when the projector is tilted to a maximum of ±15°.



## **Selecting the Input Source**

When a device is connected, projection commences automatically without having to select the input source, however when connected to two or more devices, you need to switch between the input sources.

## **Projector**

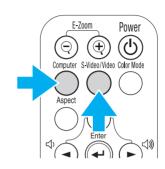


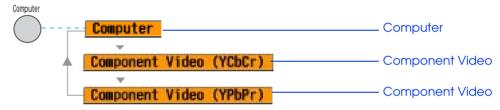
The input source changes each time [Source] is pressed.

The items selected using the "Input signal" command in the "Image" menu are displayed. See "Image menu" on page 36.



#### Remote control





The input source switches between Computer and Component video whenever the [Computer] button is pressed, as shown above.



The input source switches between S-Video and Video whenever the [S-Video/Video] button is pressed, as shown above.



If two or more sources are connected, be sure to swap the audio cables between the connected equipment, when necessary.

# **Advanced Operation**

## **Functions for Enhancing Projection**

## Adjusting computer generated images

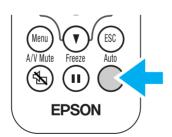
The computer signal is analyzed and the following settings are adjusted to ensure the optimum image quality.

- Tracking†
- Position
- Sync.†



You can set Auto setup to off in the "Image" → "Auto Setup" configuration menu. (The default is ON) See "Image menu" on page 36.

When Auto setup is set to off, press the [Auto] button on the remote control to perform auto setup.





If you press the [Auto] button during E-Zoom or Freeze operation, or when a configuration menu is being displayed, the display will be halted and auto setup will take place.

Adjust the Tracking and Sync settings manually if Auto setup cannot be performed. ([Menu] button  $\rightarrow$  "Image"  $\rightarrow$  "Picture Quality"  $\rightarrow$  "Tracking," "Sync.") See "Image menu" on page 36.

#### Selecting a color mode

There are five present color modes available for use. Make a selection appropriate to the conditions in which you are projecting.

#### • Dynamic

Images are modulated and made crisper to emphasize brightness.

#### • Presentation

Brightness is emphasized. For presentations in bright rooms.

#### • Theatre

Best for watching movies in their natural tones.

#### • Living Room

Brightness is emphasized. Ideal for playing video games in bright rooms.

#### • sRGB†

Conforms to the sRGB color standard. If the connected source has an sRGB mode, set both the projector and the connected source to sRGB.

The color mode changes each time you press the [Color Mode] button on the remote control.

 $\begin{array}{l} \text{Dynamic} \rightarrow \text{Presentation} \rightarrow \text{ Theatre} \rightarrow \text{Living} \\ \text{Room} \rightarrow \text{sRGB} \end{array}$ 

# E-Zoom Power Computer S-Video/Video Color Mode

#### **Default Value**

Computer input: Presentation

Other input: Dynamic



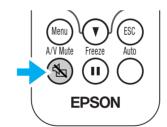
You can set the color mode in the "Image"  $\rightarrow$  "Color Mode" configuration menu.

See "Image menu" on page 36.

#### A/V Mute

Temporarily stops the image and sound.

- Press the [A/V Mute] button on the remote control. The sound and image disappear.
- Projection is resumed when you press the [A/V Mute] button again or press the [Esc] button.





- The screen color during A/V Mute can be set to black or blue. The default setting is blue. ([Menu] button → "Setting" → "Display" → "Background Color") See "Setting menu" on page 39.
- When activated while projecting moving images, the sound and image will continue to be played back by the source, so it will not be possible to return to the point where A/V Mute was activated.

#### Freeze

Pauses the projected images.

- Press the [Freeze] button on the remote control. The projected image freezes.
- ▶ To cancel, press the [Freeze] button again, or press the [Esc] button.



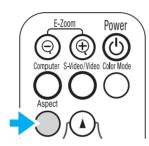


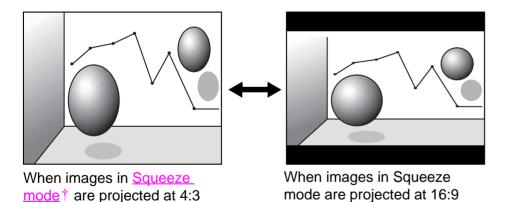
- During Freeze, moving images will continue to be played back by the source, so it will not be possible to return to the point where Freeze was activated.
- Pressing the [Freeze] button also clears configuration menus.

## **Projecting in widescreen (changing aspect ratio)**

This function changes the <u>Aspect ratio</u>† of images from 4:3 to 16:9 when component video images (YCbCr and YPbPr) or video images (S-Video or composite video) are being projected. Images which have been recorded in digital video or onto DVDs can be viewed in 16:9 wide-screen format.

Press the [Aspect] button on the remote control to change the screen size as follows:





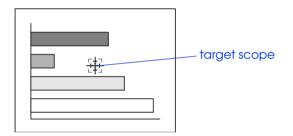
#### E-Zoom

The image is enlarged or reduced.

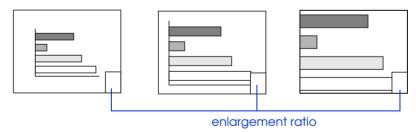
1 Press the [E-Zoom⊕] button on the remote control.

A target scope is displayed on the screen.

Press the [▲][▼][◀][▶] buttons to move the target scope to the center of the part you wish to enlarge/reduce.



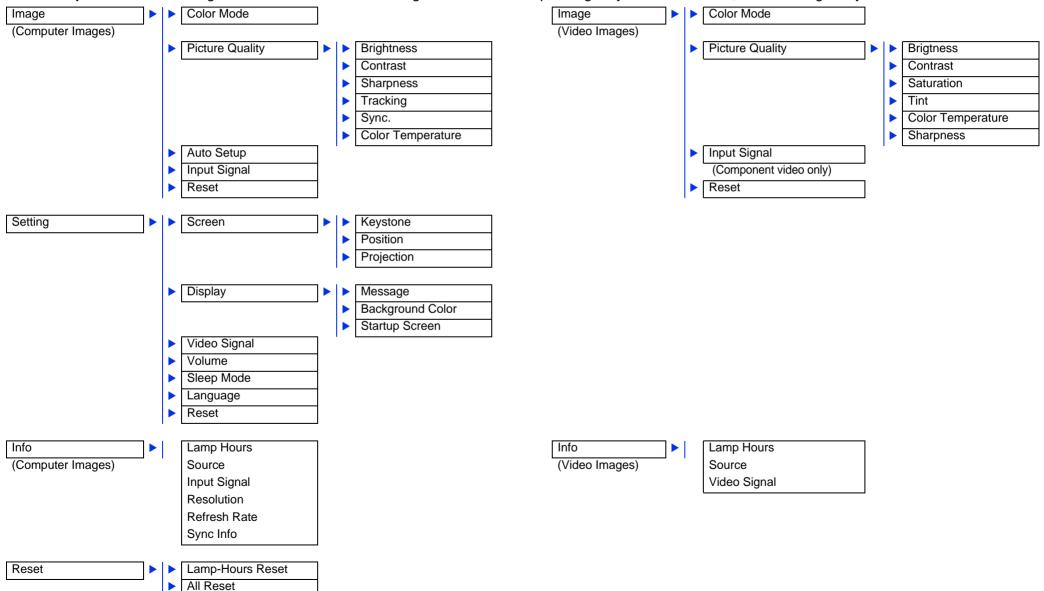
Push [E-Zoom⊕] to enlarge the image. Push [E-Zoom⊝] to reduce the enlarged image.



- [E-Zoom⊕]: Enlarges part of the image without changing the size of the projection area.
- [E-Zoom⊖]: Reduces the part of the image that has been enlarged using the [⊕] button.
- You can scroll with the [▲][▼][◄][▶] buttons.
- Press [Esc] to cancel.

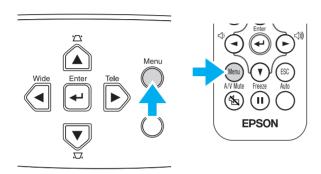
## **Configuration Menus**

Various adjustments and settings can be made within the configuration menus. Depending on your video source, some settings may not be available.

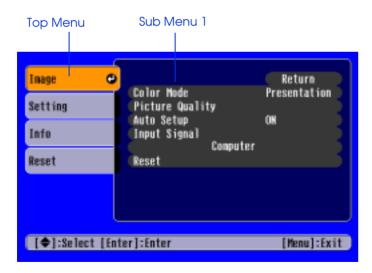


## **Menu operation**

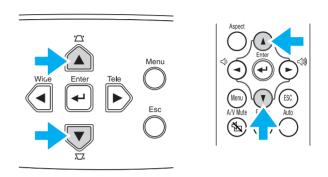
1 Press the [Menu] button



The top configuration menu is displayed.

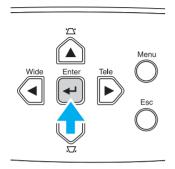


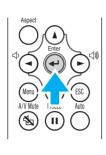
2 Press the [▲] or [▼] buttons to select the Top Menu item.





3 Press the [←] button.



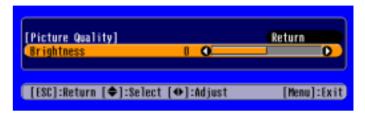


Sub Menu 1 is displayed.



- 4 Press the [▲] or [▼] buttons to select the Sub Menu 1 items, then press the [←] button.
- 5 For Sub Menu 2, press the [▲] or [▼] buttons in the same way, then press the [←] button.

- 6 Settings can be changed in the follwing ways:
  - (a) Press the [◀] or [▶] buttons to change the setting values.



(b) Press the [▲] or [▼] buttons to select the menu item. Then press the [←] button.



- (Green): Item currently set.
- (Orange): Item currently selected.

Press the [←] button to confirm the selection.

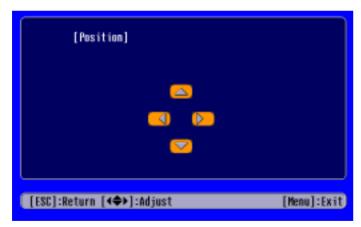


The mark is displayed after items which perform a setting or lead to a sub menu.

(c) Press the [◄] or [▶] buttons to select the value. Then, press the [←] button.



(d) Press the [▲] [▼] [◄] [▶] buttons to move the image display position.



7 Set other items in the same way.

Press the [Esc] button to return to the previous item or menu, or select "Return."

8 Press the [Menu] button to finish.

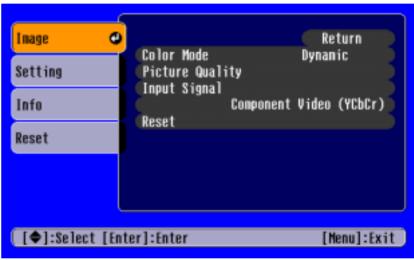
#### **Function list**

#### Image menu

- When no signal is being input, only the settings for "Auto Setup" and "Input Signal" can be adjusted.
- The functions in the "Image" Menu will be different according to the type of signal which is being input.



Computer images



Video images

"Input Signal" only appears on menu screens when component video images are being projected.